

REMARKS

Introduction

Receipt of the Office Action mailed October 28, 2009, is acknowledged. Upon entry of this Response, claims 1 to 4 and 6 to 35 will be pending of which claim 1 is independent. No new matter has been added.

Interview Summary

Applicants appreciate the courtesies extended to their Representative during an interview conducted on March 12, 2010 by Telephone. On the phone call were Examiner Tischler of the USPTO and the Applicants' representatives, Dr. Mridula Pottathil and Mr. Bryan Jones. Applicant's discussed this case and co-pending case US 10/576,256. Examiner has issued an Interview Summary in co-pending case US 10/576,256. Applicants believe that the record is correct and also summarizes the discussion as it pertains to the current case US 10/582,545.

Claim Rejections:

Double Patenting

Claims 1 to 35 were provisionally rejected under the judicially created non-statutory obviousness-type double patenting as being unpatentable over claims 1 to 32 of co-pending U.S. Pat. Application No. 10/576256 in view of Feraudy (US 6,460,788). Claim 5 is cancelled and, Applicants respectfully repeat their request that this rejection be withdrawn in the current application. In addition, with respect to the remaining claims, Applicants believe that they are patentably distinct from claims 1-4, 6, and 8-32 of co-pending Application No. 10/576256. Both applications claim a method for selective density separation of a mixture of waste synthetic organic materials to be reused having a density of at least 1 and while there is a common feature, namely the solid powder particles of not more than 5 μm , the additional features of the method are distinct. In addition, while the Feraudy patent (US 6,460,688) claim a method for selective density separation of a mixture of waste synthetic organic materials to be reused having a density of at least 1, it does not claim the feature of the instant application, namely a particle size of not more than 5 μm in order to achieve density separation at the levels of precision claimed in the

instant application. Applicants therefore, respectfully request reconsideration and withdrawal of this rejection.

Rejections under 35 U.S.C. §103

Rejection based on Feraudy (US 6,460,788).

Claims 1-4, 6-11 and 28-35 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Feraudy (US 6,460,788). This rejection is respectfully traversed for at least the following reasons.

Although the Examiner acknowledges that Feraudy is silent on the size of the powder particles and the circulating flow rate (See Office Action, page 4), she argues that because Feraudy discloses the same particle types, that the said particles are inherently of the same size. In essence, the Examiner argues that Feraudy inherently discloses the particle size limitation. Applicant disagrees.

In order for a reference to inherently disclose a limitation, the Examiner must be able to demonstrate that the missing limitation is necessarily present in the prior art disclosure. M.P.E.P. § 2112(IV). “The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” *Id.* (citing *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981)).

Here, there is no inherent disclosure that the particle size should be kept at not more than 5 µm or that the clay particles are “necessarily” not more than 5 µm. Quite the contrary, the art makes clear that the clay may be of various sizes. Rather, the clay particles are not all the same size and, to achieve a particular size, the material must be manipulated. Indeed, the Examiner has in previous actions relied on the Allen citation (WO 2004/009200) for evidence of particles of various sizes. In particular, Allen states:

The particular particle size distribution selected for the media varies with the choice of media material and configuration of the separation system and is usually described by the classification technique used to achieve the particle size" (page 12, line 12-15).

Therefore, a specific particle size is not an inherent quality of the material but one that must be achieved by mechanical manipulation.

Moreover, it would not have been obvious to try a specific particle size, much less one of no more than 5 μm , in order to achieve more precision in controlling the density differential. Feraudy is silent on the particle size because it was not at that time considered an aspect that would enable finer control of density separation. Furthermore, Feraudy's silence on particle size does not imply that any typical powder size can be used with reasonable expectation of success.

In addition, Feraudy is silent on the circulating flow rate. While various methods of adjusting the flow rate are known, the precise flow rate combined with the particle size claimed in the instant application would not have been obvious.

Applicants thus respectfully request that the Examiner withdraw this basis for rejection.

Rejection based on Feraudy (US 6,460,788) in view of Allen (WO 2004/009200) and further in view of Boutin et al (US 4,504,643).

Claims 12-27 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Feraudy (US 6,460,788) in view of Allen (WO 2004/009200) and further in view of Boutin et al (US 4,504,643). This rejection is respectfully traversed for at least the following reasons.

As addressed above, Feraudy does not disclose, either expressly or inherently, the specific particle size now being claimed. Neither Allen nor Boutin *et al.* overcome this deficiency of Feraudy. Allen¹ specifically teaches away from such fine particles. Allen makes clear that particles finer than 5 to 30 μm are removed to avoid foaming and surface contamination. See, Allen at page 11, line 9 to page 13, line 17. Boutin *et al.* does not suggest or otherwise disclose using any specific particle sizes as a method of achieving increased precision in density separation techniques. Therefore, Applicants respectfully submit that claims 12-27 are

¹ The Examiner refers to Allen in asserting this rejection, but does not explain how Allen is applied to the claims. Nonetheless, Applicants respectfully submit that Allen fails to overcome the deficiencies of either Boutin or Feraudy.

patentable over de Feraudy in view of Allen and further in view of Boutin *et al.* and respectfully request withdrawal of this rejection.

Rejection based on Feraudy (US 6,460,788) in view of Allen (WO 2004/009200).

Claim 35 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Feraudy (US 6,460,788) in view of Allen (WO 2004/009200). This rejection is respectfully traversed for at least the following reasons.

Allen does overcome the deficiencies of Feraudy. Allen does not teach us of solid powder particles no more than 5 μm , and in fact teaches away from such fine particles. Furthermore, Allen does not teach or suggest a flow rate of at most 40 m^3/h . Therefore, Applicants respectfully submit that claim 35 is patentable over de Feraudy in view of Allen and respectfully request withdrawal of this rejection.

CONCLUSION

In view of the amendments and remarks above, Applicants respectfully submit that this application is in condition for allowance and request favorable action thereon. The Examiner is invited to contact the undersigned if any additional information is required.

As this response is filed within the shortened statutory period for reply, Applicants believe that no fee, other than the fee for a two month extension of time, is due. If additional fees are required, they may be charged to Deposit Account No. 50-4254, referencing Attorney Docket No. 2901653-000014.

Respectfully submitted,

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